

We claim:

1. A process for preparing tolylene diisocyanate by reaction of amines with phosgene in a reactor and subsequent separation of the isocyanate from the reaction mixture and purification of the isocyanate, wherein the separation and purification of the isocyanate is carried out in a column having a pressure at the top of 1-950 mbar, preferably 5-50 mbar, particularly preferably 10-20 mbar, and a temperature at the bottom of 90-250°C, preferably 120-170°C, particularly preferably 130-150°C, and the column is operated with countercurrent flow of gas and liquid, the pure isocyanate stream being taken off in liquid or gaseous form at a side offtake of the column and the residence time in the bottom of the column being not more than 6 hours, based on the product taken off at the bottom, and wherein the column has a vertical dividing wall.
2. The process according to claim 1, wherein the bottom product from the column still contains isocyanate which is depleted in a further apparatus at a pressure of 1-500 mbar, preferably 5-25 mbar, and a temperature of 100-225°C, preferably 110-140°C, down to a concentration of <10% by weight based on the feed stream to the first column.
3. The process according to either of claims 1 and 2, wherein the column is preceded by a single-stage or multistage vaporization.
4. The process according to any of claims 1 to 3, wherein an intermediate vaporization is carried out on the column.
5. The process according to any of claims 1 to 4, wherein a flow-through vaporizer, preferably a falling film evaporator, long tube evaporator or thin film evaporator, is used as vaporizer for the column, the preliminary vaporization and the intermediate vaporization.
6. The process according to any of claims 1 to 5, wherein the column is packed with sheet metal packing, woven fabric packing or mesh packing.

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7. The process according to any of claims 1 to 6, wherein the residence time in the bottom of the column is not more than six hours, preferably not more than four hours, based on the product taken off at the bottom.

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8. The process according to any of claims 1 to 7, wherein the reaction mixture is fed into the lower part of the first column for separating off the isocyanate.

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